

REMARKS

Claims 1-6 are pending in this application, with claims 1 and 4 being independent.

Claims 1 and 4 have been amended. Care has been taken to avoid introduction of new matter.

Favorable reconsideration of the application in light of the following comments is respectfully solicited.

Claim Rejections – 35 U.S.C. § 103

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 6,065,073 (“Booth”) in view of U.S. Patent Application Publication Number 2003/0217215 (“Taborek”). Claims 2 and 3 were rejected under § 103(a) as being unpatentable over Booth in view of Taborek and further in view of XENPAK Multi-source agreement (“XENPAK”). Claims 4-6 were rejected under § 103(a) as being unpatentable over U.S. Patent Number 5,136,582 (“Firoozmand”) in view of Booth, Taborek, and XENPAK. Applicants respectfully request reconsideration and withdrawal of the above-stated rejections for at least the following reasons.

As amended, claim 1 recites a communication module used in Fast Ethernet (R). The communication module includes a retimer controlling a physical layer; and a microcomputer performing general control of said communication module. The microcomputer includes a storing portion storing a copy of a register included in said retimer and having a value updated by said retimer in accordance with predetermined timing, and an input/output portion outputting the copy of the register stored in said storing portion to a host device in accordance with a request by said host device.

Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 because Booth and Taborek, either alone or in combination, fail to describe or suggest a

communication module used in Fast Ethernet (R) that includes a retimer controlling a physical layer and a microcomputer performing general control of said communication module, wherein said microcomputer includes a storing portion storing a copy of a register included in said retimer and having a value updated by said retimer in accordance with predetermined timing, as recited in claim 1 (emphasis added).

Booth discloses a system for auto-polling to determine the current link status. Booth at col. 8, lines 11-12. The system includes a host CPU and a network interface card (“NIC”). Booth at col. 8, lines 13-14. The NIC includes a physical layer device and an auto-polling unit and is configured to signal the host CPU whenever an interrupt condition has been detected. Booth at col. 8, lines 14-15 and lines 40-42. Apparently, by doing so, the CPU does not have to waste bandwidth continually polling network interface devices, thereby leading to a more efficient use of system resource. Booth at col. 8, lines 42-44.

To this end, Booth does not appear to describe or suggest a retimer controlling a physical layer. As such, Booth does not describe or suggest a communication module used in Fast Ethernet (R) that includes a retimer controlling a physical layer and a microcomputer performing general control of said communication module, wherein said microcomputer includes a storing portion storing a copy of a register included in said retimer and having a value updated by said retimer in accordance with predetermined timing, as recited in claim 1 (emphasis added).

The Office Action concedes that Booth does not describe or suggest a retimer controlling a physical layer. *See e.g.*, Office Action at page 4, lines 15-16. However, the Office Action alleges that Booth, in column 8, lines 11-32, teaches an auto polling unit configured to copy in a predetermined time period the value of a status register included in a physical layer device, and that Taborek, in paragraphs [53, 56], teaches a retimer controlling a physical layer. *See e.g.*,

Office Action at page 3, lines 3-23. With this in mind, the Office Action seems to conclude that it would have been obvious to replace the auto polling unit of Booth, which is configured to copy a register of a physical layer device, with the retimer of Taborek to arrive at the above-recited feature of claim 1 (e.g., having a copy of the register being updated by the retimer in accordance with the predetermined timing). *See e.g.*, Office Action at page 3, line 20-23.

However, even assuming *arguendo* such combination is possible, Booth and Taborek still fail to describe or suggest a communication module used in Fast Ethernet (R) that includes a retimer controlling a physical layer and a microcomputer performing general control of said communication module, wherein said microcomputer includes a storing portion storing a copy of a register included in said retimer and having a value updated by said retimer in accordance with predetermined timing, as recited in claim 1 (emphasis added). That is, regardless of Taborek's teaching of a retimer controlling a physical layer, Taborek does not appear to teach that the retimer includes a register.

Accordingly, the proposed combination of Booth and Taborek does not appear to describe or suggest a communication module used in Fast Ethernet (R) that includes a retimer controlling a physical layer and a microcomputer performing general control of said communication module, wherein said microcomputer includes a storing portion storing a copy of a register included in said retimer and having a value updated by said retimer in accordance with predetermined timing, as recited in claim 1 (emphasis added).

In contrast, the proposed combination appears to describe that the retimer controls monitoring and copying of a register included in another device (e.g., physical layer devices 940A, 940B illustrated by FIG. 9 of Booth). That is, the proposed combination of Booth and Taborek does not appear to describe a microcomputer that includes a storing portion for storing a

copy of a register included in the retimer and having value updated by the retimer. For at least the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1, along with its dependent claims.

As noted above, claim 4 was rejected under § 103(a) as being unpatentable over Firoozmand in view of Booth, Taborek, and XENPAK. The Office Action concedes that Firoozmand does not show the above-recited feature of claim 4 and relies on Booth to show this feature. *See e.g.*, Office Action at page 7, lines 6-11. However, as noted above, Booth is equally deficient in this regard. Accordingly, combination of Booth and Firoozmand does not describe or suggest a communication module for use in Fast Ethernet (R) that includes, among other features, a first storing portion storing a copy of a register included in said retimer and having a value updated by a retimer in accordance with predetermined timing, as recited in claim 4.

Furthermore, XENPAK was relied upon for an alleged teaching of storing content of a register defined by 10-Gb Ethernet (R) communication module multi-source agreement. As such, it does not appear that the proposed addition of subject matter from XENPAK remedies the shortcomings of Firoozmand, Booth, and Taborek to describe or suggest the above-recited features of claim 4. For these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 4, along with its dependent claims.

Dependent Claims

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Because claims 1 and 4 are allowable for the reasons set

forth above, it is respectfully submitted that all claims dependent thereon are also allowable. In addition, it is respectfully submitted that the dependent claims are allowable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are allowable over the cited prior art. Accordingly, it is respectfully requested that the rejection under § 103 be withdrawn.

Conclusion

Having fully responded to all matters raised in the Office Action, Applicant submits that all claims are in condition for allowance, an indication of which is respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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